

ABSTRACT OF THE DISCLOSURE

5 A bubble-actuated valve with latching may be utilized to regulate fluid
flow in any number of applications, including the controlled delivery of drugs or
other bioactive agents or compounds. The bubble-actuated valve utilizes the
bubble to move a solid object that does the actual blocking of the flow channel
to regulate the flow of liquid through the valve. The bubble-actuated valve may
also include a latching mechanism. One such latching mechanism utilizes the
capillary attraction between the solid object and neighboring walls to latch the
10 solid object in place when the valve is not actuated.